

**Transmittal Letter to the United States  
Designated/Elected Office (DO/EO/US)**

Prepared from  
FORM PTO-1390

1017 Rec'd PCT/PTO

18 MAY 2001

Page 1

Customer No.	026418	
Attorney's Docket No.:	GK-ZEI-3126 / 500343.20127	
U.S. Application No.:	09/856222	
International Application No.:	PCT/EP00/09199	
International Filing Date:	SEPTEMBER 20, 2000	20 SEPTEMBER 2000
Priority Date Claimed:	SEPTEMBER 29, 1999	29 SEPTEMBER 1999
Title of Invention:	MICROSCOPE, ESPECIALLY MICROSCOPE USED FOR INSPECTION IN SEMICONDUCTOR MANUFACTURE	
Applicant(s) for (DO/EO/US):	Thomas ENGEL, Wolfgang HARNISCH and Roland SCHELER	

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- ☒ 1. This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
- ☐ 2. This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
- ☐ 3. This express request to begin national examination procedures [35 U.S.C. 371 (f)] at any time rather than delay examination until the expiration of the applicable time limit set forth in 35 U.S.C. 371(b) and PCT Articles 22 and
- ☐ 4. A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
- ☒ 5. A copy of the International Application as filed [35 U.S.C. 371(c)(2)]
  - a) ☐ is transmitted herewith (required only if not transmitted by the International Bureau)
  - b) ☐ has been transmitted by the international Bureau
  - c) ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
- ☐ 6. A translation of the International Application into English [35 U.S.C. 371(c)(2)] **TO FOLLOW**
- ☐ 7. Amendments to the claims of the International Application under PCT Article 19 [35 U.S.C. 371(c)(3)]
  - a) ☐ are transmitted herewith (required only if not transmitted by the International Bureau)
  - b) ☐ have been transmitted by the International Bureau
  - c) ☐ have not been made; however, the time limit for making such amendments has **NOT** expired.
  - d) ☐ have not been made and will not be made
- ☐ 8. A translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)]
- ☐ 9. An Oath or declaration of the inventor(s) [35 U.S.C. 371(c)(4)] **Executed Decl/POA TO FOLLOW**
- ☐ 10. A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 [35 U.S.C. 371(c)(5)]

**Items 11. to 16. Below concern other document(s) or information included:**

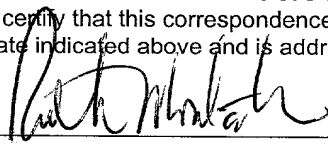
- ☐ 11. An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98
- ☐ 12. An Assignment document for recording. A separate cover sheet (PTO-1619A) in compliance with 37 CFR 3.28 and 3.31 is included.
- ☐ 13. ☐ A **FIRST** preliminary amendment  
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment
- ☐ 14. A **substitute specification**
- ☐ 15. A change of power of attorney and/or address letter
- ☒ 16. (other items or information) **PCT/RO/101 and Publication No. WO 01/23940 5APR01 and Search Report (PCT/ISA/210 dated 6MAR01**

**THIS APPLICATION IS FILED IN THE GERMAN LANGUAGE**

EXPRESS MAIL No.: **EL 645 878 625 US**

Deposited: **May 18, 2001**

I hereby certify that this correspondence is being deposited with the United States Postal Service Express mail under 37 CFR 1.10 on the date indicated above and is addressed to: BOX PCT, Commissioner for Patents, Washington, DC 20231.



/Ruth Montalvo Date: **May 18, 2001**

09/856222

U.S. Application No. (if known, see 37 C.F.R. 1.50):

International Application No.: **PCT/EP00/09199**Attorney's Docket No: **GK-ZEI-3126 / 500343.20127**

CALCULATIONS

PTO USE ONLY

☒ 17. The following fees are submitted:**BASIC NATIONAL FEE [37 CFR 1.492(a)(1)-(5)]****JC18 Rec'd PCT/PTO 1 8 MAY 2001**

- ☒ Search Report has been prepared by the EPO or JPO..... \$ 860.00
- ☐ International preliminary examination fee paid to USPTO [37 CFR 1.482]..... \$ 690.00
- ☐ No International preliminary examination fee paid to USPTO [37 CFR 1.482] but International search fee paid to USPTO [37 CFR 1.445(a)(2)]..... \$ 710.00
- ☐ Neither International preliminary examination fee [37 CFR 1.482] nor International search fee [37 CFR 1.445(a)(2)] paid to USPTO..... \$ 1,000.00
- ☐ International preliminary examination fee paid to USPTO [37 CFR 1.482] and all claims satisfied provisions of PCT Article 33(1)-(4)..... \$ 100.00

**ENTER APPROPRIATE BASIC FEE AMOUNT:****\$860.00**

Claims

Number  
FiledNumber  
Extra

Rate

Total Claims

**5****-20**

x \$ 18. =

Indep. Claims

**1****-03**

x \$ 80. =

☐ Multiple Dependent Claim(s) (if applicable)

+ \$ 270. =

**TOTAL OF ABOVE CALCULATIONS:****\$860.00**Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date [37 CFR 1.492(e)]**TOTAL OF ABOVE CALCULATIONS:****\$860.00**

Applicant claims Small Entity Status [See 37 CFR 1.27] Reduction by 1/2 for filing by small entity

**SUBTOTAL:****\$860.00**Processing fee of \$130.00 for furnishing the English Translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date [37 CFR 1.492(f)]**TOTAL NATIONAL FEE:****\$860.00**

Fee for recording the enclosed assignment [37 CFR 1.21(h)] The assignment must be accompanied by an appropriate cover sheet (PTO-1595) [37 CFR 3.28, 3.31]. \$ 40.00 per property +

**TOTAL FEE(S):****\$860.00**AMOUNTS TO BE  
REFUNDED OR CHARGED**REFUNDED  
CHARGED**\$  
\$☒ Check in the amount of **\$ 860.00** to cover the above fees is enclosed. (The Commissioner is hereby authorized to charge any additional fees required with this submission or to credit any overpayment to Deposit Account No: 50-1529.)**NOTE:** Where an appropriate time limit under 36 CFR 1.494 or 1.495 has not been met, a petition to revive [37 CFR 1.137(a) or (b)] must be filed and granted to restore the application to pending status.**SEND ALL CORRESPONDENCE TO:****Gerald h. Kiel, Esq.****(Customer No. 026418)**

Reed Smith LLP

375 Park Avenue

New York, NY 10152

Gerald H. Kiel

Signature

Name (Tel. (212) 521-5400)

25,116

Reg. No.

May 18, 2001

Date

Rec'd PCT/PTO 20 AUG 2001 #4

09/856222

EXPRESS MAIL mailing label No. EL 915 669 961 US Date of Deposit August 20, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

  
Ruth Montalvo

20 AUG 01  
Date

Docket No.: GK-ZEI-3126/500343.20127

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Thomas ENGEL, Wolfgang HARNISCH and  
Roland SCHELER

Serial No.: 09/856,222

Filed: May 18, 2001

For: MICROSCOPE, ESPECIALLY MICROSCOPE USED  
FOR INSPECTION IN SEMICONDUCTOR MANUFACTURE

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to receipt of a first Office Action in the above-identified application, please amend this application as follows:

**IN THE SPECIFICATION**

Cancel the present specification and substitute therefor the enclosed substitute specification.

## **IN THE CLAIMS**

Page 3 line 1, change "PATENT CLAIMS" to --What is claimed is:--.

Cancel claims 1-5 and add new claims 6-13, reading as follows:

--6. (new) A microscope, especially for inspection during semiconductor manufacture comprising:

a pulsed laser for illumination, said laser being in the UV range; and

at least one rotating diffusion disk is arranged behind the laser for the homogenization of the illumination.

7. (new) The microscope according to claim 6, including two diffusion disks rotating in opposite directions arranged directly or indirectly behind each other in the illumination ray path.

8. (new) The microscope according to claim 6, wherein the diffusion disk is either of a granulated or of a holographically produced design.

9. (new) The microscope according to claim 6, with a rotation speed of at least such a magnitude that a rotation by at least one grain size and/or the resolution limit of a holographically generated structure or by the length of a structure takes place between two laser pulses.

10. (new) The microscope according to claim 6, with an illumination laser wavelength which essentially corresponds to the illumination wavelength during the manufacture of semiconductors.

11. (new) The microscope according to claim 10, wherein the illumination wavelength is in the range of 193nm or 248nm or 266nm or 366nm, all with a tolerance of +/-2nm.

12. (new) An inspection device for use in semiconductor manufacture comprising:

a laser module with pulsed UV laser;

a transmitter port;  
a microscope having at least one rotating diffusion disk arranged behind the laser for the homogenization of the illumination;  
a scanning table;  
a CCD camera;  
a screen; and  
a microscope controller.

13. (new) In an inspection device for use in semiconductor manufacture, having a microscope, an improvement comprising that said laser is a pulsed laser in the UV range and at least one rotating diffusion disk is arranged behind the laser for the homogenization of the illumination.--

**IN THE ABSTRACT OF THE DISCLOSURE**

Cancel the present Abstract of the Disclosure and substitute therefor the enclosed Abstract of the Disclosure which is attached to the substitute specification.

**REMARKS**

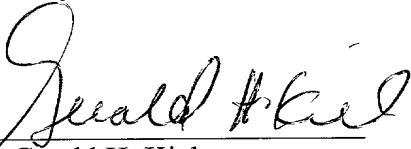
Claims 1-5 have been cancelled and new claims 6-13 have been added.  
The amendments to the claims have been made only to improve the form of the claims for examination purposes.

The specification and abstract have been amended to conform it to U.S. format.

An early and favorable action on the merits is respectfully requested.

Respectfully submitted,

By:

  
Gerald H. Kiel  
Reg. No. 25,116

August 20, 2001  
REED SMITH LLP  
375 Park Avenue  
New York, NY 10152-1799  
GHK:jl  
Enc.: Substitute Specification  
Abstract of the Disclosure

Rec'd PCT/PTO 20 AUG 2001  
09/856222

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SUBSTITUTE  
SPECIFICATION  
And  
ABSTRACT

FILE NO. GK-ZEI-3126/500343.20127

MICROSCOPE, ESPECIALLY MICROSCOPE USED FOR INSPECTION IN  
SEMICONDUCTOR MANUFACTURE

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CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority of International Application  
No. PCT/EP00/09199, filed September 20, 2000 and German Application  
10 No. 199 46 594.0, filed September 29, 1999, the complete disclosures of which are  
hereby incorporated by reference.

BACKGROUND OF THE INVENTION

15 Field of the Invention

The invention is directed to the coupling of pulsed laser radiation into  
a microscope, especially a microscope used for the quality control and classification  
of defects of masks for the manufacture of semiconductors.

20 SUMMARY OF THE INVENTION

In accordance with the invention, a microscope, especially for use  
during inspection in semiconductor manufacture comprising a pulsed laser for  
illumination, the laser being preferably in the UV range. The microscope includes  
at least one rotating diffusion disk which is arranged behind the laser for the  
25 homogenization of the illumination

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

30 Figure 1 shows an overall diagrammatic view of an inspection device  
using a microscope in accordance with the invention;

Figure 2a shows a diagram of a coupling unit for coupling the laser  
beam into the microscope; and



Figure 2b is an additional view showing the coupling of the laser beam into the microscope.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

Advantageously, a number of laser pulses are applied to the object to be examined while one image is taken. During this, intensity modulations of the laser profile of up to 40% can occur within one pulse or over a small number of pulses, which affects the evaluation.

Figure 1 shows an overall diagrammatic view of an inspection device consisting of a laser module LM with a pulsed UV laser, a transmitter port UP, a microscope MI with an objective O and a scanning table ST, a CCD camera KA, a screen BS and a microscope controller MC.

Figure 2a and 2b show a coupling unit UP for coupling the laser beam into the microscope MI.

The laser light reaches a first rotating diffusion disk S1 via reflecting mirrors U1, U2 and then a second rotating diffusion disk S2 preferably rotating in the opposite direction as well as the microscope ray path (not shown) via a lens for beam expansion and an aperture B and the input E in Figure 1 and illuminates the object to be examined.

The laser profile is smoothed out by means of the at least one diffusion disk.

The diffusion disk rotates at a speed which is relatively low when compared to the spacing of two laser pulses.

This means that the diffusion disk is practically not moving for the duration of a laser pulse of, for example, 10ns, but also that it moves a bit further in the space of time between two laser pulses (for a repeating frequency of, for example, 200Hz) before the next laser pulse occurs.

This has the advantage of averaging out the granularity of the diffusion disk and furthermore that the granularity caused by the coherence of the laser radiation (speckle) is also averaged out.

This means that noise is reduced and the image contrast is increased and that therefore image quality is improved.

For this, the magnitude of the rotating speed of the diffusion disk can lie in the easily realized range of approximately 1 rotation per second (a speed in the range of cm/s), so that for an assumed grain size of 0.1mm a displacement by at least the size of one grain takes place between two pulses.

5                   The homogenizing effect is reinforced by a second diffusion disk rotating in the opposite direction.

Besides granulated diffusion disks (made by etching or abrasive blasting), holographic disks can also be used.

10                   CGHs (computer-generated holograms) can also be used for homogenization.

While the foregoing description and drawings represent the present invention, it will be obvious to those skilled in the art that various changes may be made therein without departing from the true spirit and scope of the present invention.

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[illegible]

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FILE NO. GK-ZEI-3126/500343.20127

MICROSCOPE, ESPECIALLY MICROSCOPE USED FOR INSPECTION IN  
SEMICONDUCTOR MANUFACTURE

**CROSS-REFERENCE TO RELATED APPLICATIONS**

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incorporated by reference.

**BACKGROUND OF THE INVENTION**

**Field of the Invention**

The invention is directed to the coupling of pulsed laser radiation into a microscope, especially a microscope used for the quality control and classification of defects of masks for the manufacture of semiconductors.

**SUMMARY OF THE INVENTION**

In accordance with the invention, a microscope, especially for use during inspection in semiconductor manufacture comprising a pulsed laser for illumination, the laser being preferably in the UV range. The microscope includes at least one rotating diffusion disk which is arranged behind the laser for the homogenization of the illumination

**BRIEF DESCRIPTION OF THE DRAWINGS**

**In the drawings:**

Figure 1 shows an overall diagrammatic view of an inspection device using a microscope in accordance with the invention;

Figure 2a shows a diagram of a coupling unit for coupling the laser beam into the microscope; and

**Figure 2b is an additional view showing the coupling of the laser beam into the microscope.**

### **DESCRIPTION OF THE PREFERRED EMBODIMENTS**

Advantageously, a number of laser pulses are applied to the object to be examined while one image is taken. During this, intensity modulations of the laser profile of up to 40% can occur within one pulse or over a small number of pulses, which affects the evaluation.

Figure 1 shows an overall diagrammatic view of an inspection device consisting of a laser module LM with a pulsed UV laser, a transmitter port UP, a microscope MI with an objective O and a scanning table ST, a CCD camera KA, a screen BS and a microscope controller MC.

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The laser profile is smoothed out by means of the at least one diffusion disk.

The diffusion disk rotates at a speed which is relatively low when compared to the spacing of two laser pulses.

This means that the diffusion disk is practically not moving for the duration of a laser pulse of, for example, 10ns, but also that it moves a bit further in the space of time between two laser pulses (for a repeating frequency of, for example, 200Hz) before the next laser pulse occurs.

This has the advantage of averaging out the granularity of the diffusion disk and furthermore that the granularity caused by the coherence of the laser radiation (speckle) is also averaged out.

This means that noise is reduced and the image contrast is increased and that therefore image quality is improved.

For this, the magnitude of the rotating speed of the diffusion disk can lie in the easily realized range of approximately 1 rotation per second (a speed in the range of cm/s), so

that for an assumed grain size of 0.1mm a displacement by at least the size of one grain takes place between two pulses.

The homogenizing effect is reinforced by a second diffusion disk rotating in the opposite direction.

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**While the foregoing description and drawings represent the present invention, it will be obvious to those skilled in the art that various changes may be made therein without departing from the true spirit and scope of the present invention.**

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1990-1991		1991-1992		1992-1993		1993-1994		1994-1995		1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217	
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The laser profile is smoothed out by means of the at least one diffusion disk.

The diffusion disk rotates at a speed which is relatively low when compared to the spacing of two laser pulses.

This means that the diffusion disk is practically not moving for the duration of a laser pulse of, for example, 10ns, but also that it moves a bit further in the space of time between two laser pulses (for a repeating frequency of, for example, 200Hz) before the next laser pulse occurs.



This has the advantage of averaging out the granularity of the diffusion disk and furthermore that the granularity caused by the coherence of the laser radiation (speckle) is also averaged out.

5 This means that noise is reduced and an the image contrast is increased and that therefore image quality is improved.

For this, the magnitude of the rotating speed of the diffusion disk can lie in the easily realized range of approximately 1 rotation per second (a speed in the range of cm/s), so that for an assumed grain size of 0.1mm a displacement by at least the size of one grain takes place between two pulses.

10 The homogenizing effect is reinforced by a second diffusion disk rotating in the opposite direction.

Besides granulated diffusion disks (made by etching or abrasive blasting), holographic disks can also be used.

15 CGHs (computer-generated holograms) can also be used for homogenization.

## PATENT CLAIMS

1. Microscope, especially for the inspection in semiconductor manufacture, with a pulsed laser for illumination, preferably in the UV range, wherein at least one rotating diffusion disk is arranged behind the laser for the homogenization of the illumination.
2. Microscope according to claim 1, with two diffusion disks rotating in opposite directions arranged directly or indirectly behind each other in the illumination ray path.
3. Microscope according to one of the preceding claims, wherein the diffusion disk is either of a granulated or of a holographically produced design.
4. Microscope according to one of the preceding claims, with a rotation speed of at least such a magnitude that a rotation by at least one grain size and/or the resolution limit of a holographically generated structure or by the length of a structure takes place between two laser pulses.
5. Microscope according to one of the preceding claims, with an illumination laser wavelength which essentially corresponds to the illumination wavelength during the manufacture of semiconductors, preferably in the range of 193nm or 248nm or 266nm or 366nm, all with a tolerance of  $\pm 2\text{nm}$ .

## 5

The invention relates to a microscope, especially a microscope that is used for inspection in semiconductor manufacture.. The inventive microscope comprises a pulsed laser for the purpose of illumination, preferably in the UV range. At least one rotating diffusion disk is disposed downstream of the laser so as to homogenize the illumination. Preferably, two rotating diffusion disks of opposite rotational sense are disposed in the illumination beam path either directly or indirectly one behind the other.



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PCT/EP00/09119

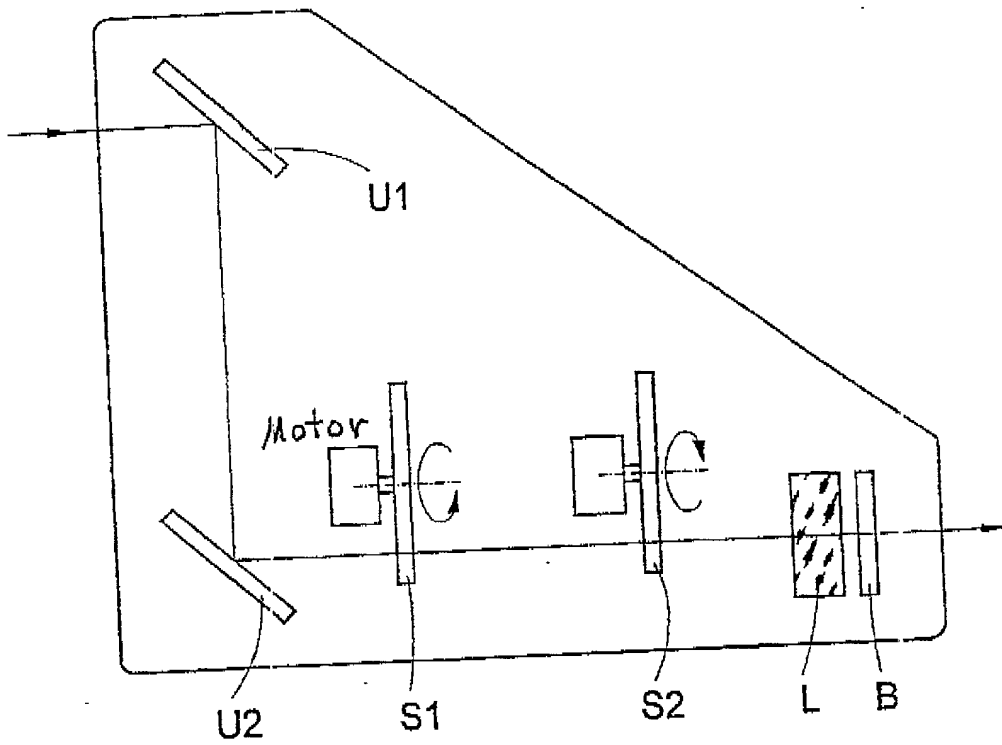


Fig. 2a

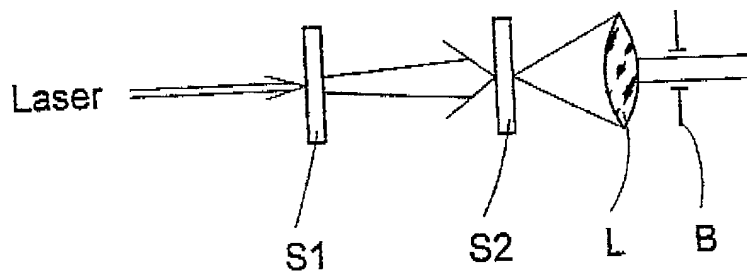


Fig. 2b

#3

UNITED STATES OF AMERICA  
COMBINED DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION

FILE NO. GK-ZEI-3126  
50343.20127

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

MICROSCOPE, ESPECIALLY MICROSCOPE USED FOR INSPECTION IN  
SEMICONDUCTOR MANUFACTURE

The specification of which

☐ is attached hereto.

☒ was filed on May 18, 2001 as United States patent application Serial Number 09/856,222.

☒ was filed on September 20, 2000 as PCT international patent application No. PCT/EP00/09199 and was amended on \_\_\_\_\_ (if any).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information known to be material to patentability in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. § 119
Germany	199 46 594.0	29 September 1999	YES <u>x</u> NO ____
			YES ____ NO ____

I hereby appoint REED SMITH LLP and the members of the firm: Lloyd McAulay, Reg. No. 20,423; Jules E. Goldberg, Reg. No. 24,408; Gerald H. Kiel, Reg. No. 25,116; Eugene LeDonne, Reg. No. 35,930; Stephen Chin, Reg. No. 39,938; Arthur Dresner, Reg. No. 24,403; Daniel Lent, Reg. No. 44,867; and Samir R. Patel, Reg. No. 44,998 as attorneys with full power of substitution and revocation to prosecute all business in the Patent & Trademark Office connected therewith and to receive all correspondence.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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RESIDENCE		DATE	
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RESIDENCE		DATE	
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